IN THE CLAIMS

1. (Currently Amended) A system ~~(10)~~ for assessing blood circulation in a subject's limb ~~(12)~~, comprising:
detection means ~~(4, 60)~~ for detecting a signal ~~(I_{ac})~~ dependent upon the arterial blood volume in a limb ~~(12)~~ of the subject when the subject is in a first posture and also when the subject is in a second posture, different to the first posture; and
processing means ~~(56)~~ for calculating a quantitative indicator ~~(R, R')~~ that is dependent upon the ratio of the signal for the first posture ~~($I(1)_{AC}$)~~ to the signal for the second posture ~~($I(2)_{AC}$)~~.

2. (Currently Amended) A system ~~(10)~~ as claimed in claim 1, wherein the quantitative indicator ~~(R, R')~~ is directly proportional to the ratio of the signal for the first posture ~~($I(1)_{AC}$)~~ to the signal for the second posture ~~($I(2)_{AC}$)~~.

3. (Currently Amended) A system ~~(10)~~ as claimed in claim 1 ~~or 2~~, wherein the signal is a pulsating component ~~(I_{AC})~~ of a measured parameter ~~(I)~~, the measured parameter being dependent upon the blood volume in the subject's limb.

4. (Currently Amended) A system ~~(10)~~ as claimed in claim 3, wherein the calculation of the quantitative indicator ~~(R, R')~~ is additionally dependent upon the ratio of a non-pulsating component of the measured parameter for the second posture ~~($I(2)_{DC}$)~~ to a non-pulsating component of the measured parameter for the first posture ~~($I(1)_{DC}$)~~.

5. (Currently Amended) A system ~~(10)~~ as claimed in claim 4, wherein the quantitative indicator is directly proportional to the ratio of the non-pulsating component of the measured parameter for the second posture ~~($I(2)_{DC}$)~~ to the non-pulsating component of the measured parameter for the first posture ~~($I(2)_{DC}$)~~.

6. (Currently Amended) A system ~~(10)~~ as claimed in ~~any preceding~~ claim 1, wherein the detection means ~~(4, 60)~~ comprises measurement means ~~(4)~~ operable to

measure a parameter ~~(I)~~ indicative of the blood volume of the subject's limb when the subject is in a first posture and to measure the parameter when the subject is in a second posture and comprising means for isolating ~~(51)~~ a pulsating component ~~(I_{AC})~~ of the measured parameter.

7. (Currently Amended) A system ~~(10)~~ as claimed in ~~any preceding~~ claim 1 wherein the limb ~~(12)~~ is a foot.

8. (Currently Amended) A system as claimed in ~~any preceding~~ claim 1, wherein the position of the limb ~~(12)~~ is changed between the first posture and the second posture.

9. (Currently Amended) A system ~~(10)~~ as claimed in ~~any preceding~~ claim 1, wherein, in the first posture the limb ~~(12)~~ is at a first elevation and in the second posture the limb ~~(12)~~ is at a second elevation.

10. (Currently Amended) A system ~~(10)~~ as claimed in ~~any one of~~ claim~~s~~ 3 ~~to 9~~, wherein the measured parameter ~~(I)~~ is the intensity of light reflected from the limb ~~(12)~~ and the ratio of the signal for the first posture to the signal for the second posture reduces subject dependent influences such as variable light absorption of the blood and tissue in the limb for different subjects.

11. (Currently Amended) A method for assessing blood circulation in a subject's limb ~~(12)~~, comprising:
detecting a signal ~~($I(1)_{AC}$)~~ dependent upon the arterial blood volume in a limb ~~(12)~~ of the subject when the subject is in a first posture;
detecting the signal ~~($I(2)_{AC}$)~~ dependent upon the arterial blood volume in the limb of the subject when the subject is in a second posture, different to the first posture; and
calculating a quantitative indicator ~~(R, R')~~ that is dependent upon the ratio of the signal for the first posture ~~($I(1)_{AC}$)~~ to the signal for the second posture ~~($I(2)_{AC}$)~~.

12. (Currently Amended) A method as claimed in claim 11, further comprising:
measuring a parameter ~~(I)~~ that is dependent upon the blood volume in the subject's limb ~~(12)~~; and
isolating, as the signal ~~(I_{AC})~~, a pulsating component of the measured parameter ~~(I)~~.

13. (Currently Amended) A method as claimed in claim 12, further comprising:
isolating a non-pulsating component ~~(I_{DC})~~ of the measured parameter ~~(I)~~, wherein the quantitative indicator is additionally dependent upon the ratio of the non-pulsating component of the measured parameter for the second posture ~~($(I(2)_{DC}$)~~ to the non-pulsating component of the measured parameter for the first posture ~~($I(1)_{DC}$)~~.

14. (Currently Amended) A method as claimed in claim 13, wherein the limb ~~(12)~~ is a foot.

15. (Currently Amended) A method as claimed in ~~any one of~~ claims 11 ~~to 14~~, wherein the position of the limb ~~(12)~~ is changed between the first posture and the second posture.

16. (Currently Amended) A method as claimed in ~~any one of~~ claims 11 ~~to 15~~ wherein, in the first posture the limb ~~(12)~~ is at a first elevation and in the second posture the limb ~~(12)~~ is at a second elevation.

17. (Original) A system for assessing a subject's peripheral blood circulation, comprising:

measurement means for measuring a parameter dependent upon the blood volume in a limb of the subject when the subject is in a first posture and also when the subject is in a second posture, different to the first posture;

means for separating the parameter into a first component and a second component; and

processing means for calculating a quantitative indicator wherein the calculation takes as inputs the first component of the parameter for the first posture and the first component of the parameter for the second posture.

18. (Original) A system as claimed in claim 17, wherein the first component is a pulsating component and the second component is non-pulsating component.

19. (Currently Amended) A system as claimed in claim 17 ~~or 18~~, wherein the indicator is dependent upon the ratio of the first component of the parameter for the first posture to the first component of the parameter for the second posture.

20. (Original) A system as claimed in claim 19, wherein the indicator is directly proportional to the ratio of the first component of the parameter for the first posture to the first component of the parameter for the second posture.

21. (Currently Amended) A system as claimed in ~~any one of~~ claims 17 ~~to 20~~, wherein the indicator is dependent upon the ratio of the second component of the parameter for the second posture to the second component of the parameter for the first posture.

22. (Original) A system as claimed in claim 21, wherein the indicator is directly proportional to the ratio of the second component of the parameter for the second posture to the second component of the parameter for the first posture.

23. (Currently Amended) A system as claimed in ~~any one of~~ claims 17 ~~to 22~~, wherein the measured parameter is intensity of light.

24. (Currently Amended) A system as claimed in ~~any one of~~ claims 17 ~~to 23~~, wherein the limb is a foot.

25. (Currently Amended) A system as claimed in ~~any one of~~ claims 17 ~~to 24~~, wherein the position of the limb is changed between the first posture and the second posture.

26. (Currently Amended) A system as claimed in ~~any one of~~ claims 17 ~~to 25~~, wherein, in the first posture the limb is at a first elevation and in the second posture the limb is at a second elevation.

27. (Original) A method for assessing a subject's peripheral blood circulation, comprising:

measuring a parameter dependent upon the blood volume in a limb of the subject when the subject is in a first posture and also when the subject is in a second posture, different to the first posture;

separating the parameter into a first component and a second component; and

processing means for calculating a quantitative indicator wherein the calculation takes as inputs the first component of the parameter for the first posture and the first component of the parameter for the second posture.

28. (Original) A method as claimed in claim 27, wherein the first component is a pulsating component and the second component is non-pulsating component.

29. (Original) A method as claimed in claim 27 ~~or 28~~, wherein the indicator is dependent upon the ratio of the first component of the parameter for the first posture to the first component of the parameter for the second posture.

30. (Currently Amended) A system for assessing <u>blood circulation in</u> a subject's ~~peripheral blood circulation~~ <u>limb</u>, comprising:

measurement means operable to measure a ~~for measuring a~~ parameter ~~dependent upon~~ indicative of the blood volume ~~in a~~ of the subject's limb ~~of the subject~~ when the subject is in a first posture and to measure;~~means for separating~~ the parameter when the subject is in a second posture and comprising means for isolating a variable value of the measured parameter ~~into a first component and a second component~~; ~~and~~

processing means for ~~calculating~~ determining a quantitative indicator that is dependent upon the ratio of the variable value ~~wherein the calculation takes as inputs the first component~~ of the parameter measured for the first posture to the variable value ~~and the second component~~ of the parameter measured for the ~~first~~ second posture.

31. (Currently Amended) A system as claimed in claim 30, wherein the ~~first component is a pulsating component and the second component is a non-pulsating component~~ limb is a foot.

32. (Currently Amended) A system as claimed in claim 30 ~~or 31~~, wherein the ~~indicator is dependent upon the ratio of the first component of the parameter for the~~ first posture ~~to the second component of the parameter for the first posture~~ the limb is at a first elevation and in the second posture the limb is at a second elevation.

33. (Currently Amended) A system as claimed in claim ~~32~~ 30, wherein the ~~indicator is directly proportional to the ratio of the first component of the parameter for the first posture to the second component of the parameter for the first posture~~ measurement means comprises light sensing means and the parameter is the intensity of light reflected from the limb.

34. (Currently Amended) ~~A method for assessing a subject's peripheral blood circulation, comprising:~~

~~measuring a parameter dependent upon the blood volume in a limb of the subject when the subject is in a first posture;~~

~~separating the parameter into a first component and a second component; and~~

~~calculating a quantitative indicator wherein the calculation flakes as inputs the first component of the parameter for the first posture and the second component of the parameter for the first posture~~ A system as claimed in claim 33, wherein the measurement means additionally comprises an illumination source of fixed intensity.

35. (Currently Amended) A system for assessing blood circulation in a subject's limb, comprising: ~~measurement means operable to measure~~ measuring a parameter indicative of the blood volume of the subject's limb when the subject is in a first posture and ~~to measure the parameter when the subject is in a second posture and comprising means for~~ isolating a variable value of the ~~measured~~ parameter measured for the first posture;

~~processing means for~~ measuring the parameter indicative of the blood volume of the subject's limb when the subject is in a second posture

isolating a time-variable value of the parameter measured for the second posture;

determining a quantitative indictor that is dependent upon the ratio of the variable value of the parameter measured for the first posture to the variable value of the parameter measured for the second posture.

36. Cancelled

37. Cancelled

38. Cancelled

39. Cancelled

40. Cancelled

41. Cancelled

42. Cancelled